

Product Evaluation

RC525| 0317

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-525 **Effective Date:** March 1, 2017

Re-evaluation Date: March 2021

Product Name: 7.2 Steel Roof Panels Installed over Steel Purlins

Manufacturer: Metal Building Components, Inc. (MBCI), L.P., a division of NCI, L.P.

14031 West Hardy Houston, TX 77060 (281) 445-8555

General Description:

The 7.2 roof panels are minimum 26-gauge steel panels. The metal roof panels have a maximum 36" of coverage. The metal roof panels have a 1-1/2" rib height. The ribs are 7.2" on center. The metal roof panels are Galvalume steel with a minimum yield strength of 50,000 psi.

Limitations:

Roof Framing: The metal roof panels must be installed over open steel purlins.

New Wall Framing Attachment: The roof framing must meet or exceed the wind uplift pressure requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

Design Wind Pressures: The design pressure load resistance must be as specified in Table 1.

Roof Slope: Do not install panels on roofs with a roof slope less than 3:12.

Table 1Attachment of steel 7.2 roof panels to steel purlins

System	Panel Thickness	Design Wind Pressure	Purlins	Attachment of Panel to Steel Purlins
1	Minimum 26-gauge	-52.5 psf	Minimum 16-gauge; 63-1/4" on center	Fasteners; 7.2" on center

Installation:

General: The metal roof panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Steel Purlins: The minimum thickness of the steel and the maximum on center spacing of the purlins must be as specified in Table 1.

Attachment of Metal Panels to the Steel Purlins: Secure the panels to the steel purlins with No. 12-14 \times 3/4" self-drilling, self-tapping, hex head screws with a 5/8" diameter steel washer and a neoprene sealing washer. The fastener are spaced 7.2" on center in every valley. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the purlins.

Panel Ends and End Laps: Secure the panels to the steel purlins with No. $12-14 \times 1-1/4$ " self-drilling, self-tapping, hex head screws with a 5/8" diameter steel washer and a neoprene sealing washer. The fastener are spaced 7.2" on center in every valley. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the purlins.

Panel Side Laps: 1/4-14 x 7/8" self-drilling, self-tapping screws with 1/2" diameter steel washers and neoprene sealing washers located along the overlapping ribs at 20" on center.

Trims, Closures, and Accessories: Components, such as trims, closures, and accessories must be installed as required by the manufacturer.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.